

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of the claims in the instant application.

Claims 1-11 (Canceled)

12. (Currently Amended) An absorbent polymer structure (Pa), comprising an inner portion as well as an outer portion surrounding the inner portion, wherein the inner portion comprises a crosslinked polymer and the outer portion comprises a crosslinked polymer, wherein the polymer of the outer portion is more strongly cross-linked than the polymer of the inner portion, wherein the polymer of the outer portion is surface crosslinked with an aqueous solution comprising a chemical cross-linker, and an inorganic compound comprising silicic acid in a dispersed colloidal form, and heating the absorbent polymer structure to a temperature of from about 40 to about 300°C, wherein said inorganic compound is at least partly immobilized in the polymer of the outer portion and wherein the absorbent polymer structure (Pa) has at least one of the following properties:

- (β1) for a CRC of about 26 g/g or less, a SFC of at least about $80 \cdot 10^{-7} \text{ cm}^3 \cdot \text{s} \cdot \text{g}^{-1}$,
- (β2) for a CRC within the range more than 26 to about 27 g/g or less, a SFC of at least about $70 \cdot 10^{-7} \text{ cm}^3 \cdot \text{s} \cdot \text{g}^{-1}$,
- (β3) for a CRC within the range more than 27 to less than about 28 g/g a SFC of at least about $60 \cdot 10^{-7} \text{ cm}^3 \cdot \text{s} \cdot \text{g}^{-1}$,
- (β4) for a CRC within the range more than 28 to less than about 29 g/g a SFC of at least about $45 \cdot 10^{-7} \text{ cm}^3 \cdot \text{s} \cdot \text{g}^{-1}$,
- (β5) for a CRC within the range more than 29 to less than about 30 g/g a SFC of at least about $30 \cdot 10^{-7} \text{ cm}^3 \cdot \text{s} \cdot \text{g}^{-1}$,
- (β6) for a CRC within the range more than 30 to less than about 31 g/g a SFC of at least about $20 \cdot 10^{-7} \text{ cm}^3 \cdot \text{s} \cdot \text{g}^{-1}$,
- (β7) for a CRC within the range more than 31 g/g a SFC of at least about $10 \cdot 10^{-7} \text{ cm}^3 \cdot \text{s} \cdot \text{g}^{-1}$.

13. (Currently Amended) ~~[[An]]~~ The absorbent polymer structure (Pa) according to claim 12, wherein the absorbent polymer structure has an Absorbency against Pressure (AAP) of at least about 18 g/g under a pressure of about 50 g/cm².

14. (Currently Amended) ~~[[An]]~~ The absorbent polymer structure (Pa) according to claim 12, wherein the chemical cross-linker comprises ethylene carbonate and the inorganic compound is a condensate of polysilicic acids.

15. (Previously Presented) A composite comprising an absorbent polymer structure (Pa) according to claim 12 and a substrate.

16. (Previously Presented) A process for producing a composite, wherein an absorbent polymer structure (Pa) according to claim 12 and a substrate and optionally an additive are brought into contact with each other.

17. (Previously Presented) A composite obtainable by a process according to claim 16.

18. (Previously Presented) Chemical products, comprising the absorbent polymer structure (Pa) according to claim 12.

19. (Cancelled)

20. (Currently Amended) An aqueous solution containing at least one chemical cross-linker and ~~at least one~~ an inorganic compound comprising silicic acid in dispersed colloidal form.

21. (Currently Amended) A process for producing an aqueous solution according to claim 20, wherein an aqueous solution containing ~~at least one~~ the inorganic compound ~~in dispersed colloidal form~~ is mixed with at least one chemical cross-linker.

22. (Previously Presented) A process according to claim 21, wherein the chemical cross-linker is used in the form of an aqueous solution.

23. (Previously Presented) An aqueous solution obtainable by a process according to claim 21.

24. (Cancelled)

Claims 25-28 (Cancelled)

Claims 29-30 (Cancelled)